

Incidence of Obstetric Anal Sphincter Injuries OASIS: clinical audit of two major Victorian hospitals

Dr Ana Montoya, Dr Sangoyita Tara
Eastern Health

Introduction Obstetric anal sphincter injury (OASIS) causes significant morbidity and may lead to long-term complications, including faecal incontinence and coital dysfunction.

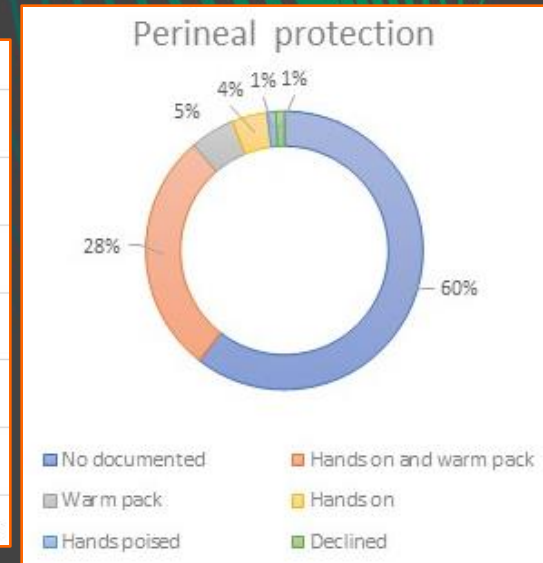
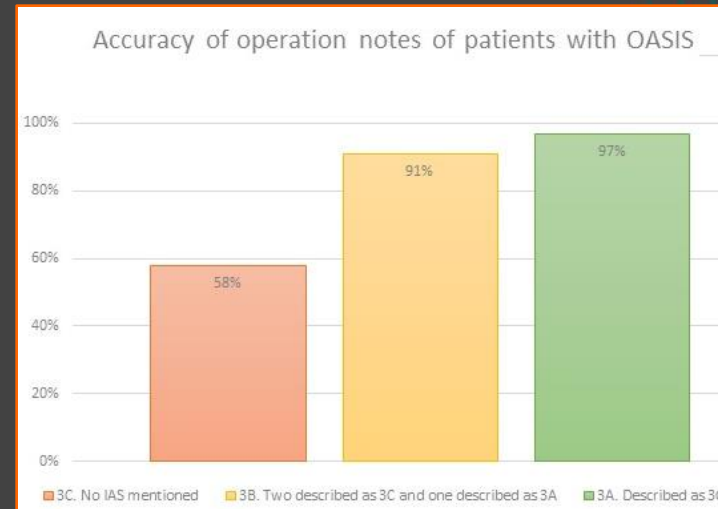
Methods Retrospective study of all women diagnosed with OASIS in two metropolitan hospitals during 2019. Complete medical records were reviewed. Analysis was done using STATA 16. The aim was to determine the incidence of OASIS and assess the compliance to our protocol.

We had 95% compliance with repair protocol including procedure performed in theatre, availability of accredited surgeons, appropriate technique, correct suture material, antibiotic and aperients use. Follow up of our patients was done through a multidisciplinary perineal clinic. Conversely, 60% of cases had no documentation of perineal protection and the type of the tear was documented accurately in only 58% of 3C tears.

| Prevalence of OASIS by maternal characteristics | | |
|---|-------------------|----------|
| Characteristics | | n (%) |
| Age | <20 | 0 |
| | 21-35 | 77 (2.3) |
| | >35 | 19 (1.3) |
| Parity | G0 | 61 (2.8) |
| | G1 | 32 (1.8) |
| | G2 or more | 3 (0.4) |
| BMI at booking | <30 | 87 (2.1) |
| | >30 | 9 (1.2) |
| Country of birth | Australia | 51 (1.7) |
| | South East Asia | 40 (3.1) |
| | Other | 5 (1) |
| Mode of delivery | Spontaneous | 62 (2.6) |
| | Vacuum | 5 (2.2) |
| | Forceps | 29 (7) |
| | Caesarean section | - |
| Birthweight | <2500g | 2 (0.9) |
| | 2501g-3999g | 82 (2) |
| | >4000g | 12 (2.4) |

Results Out of 4699 births, the overall incidence of OASIS was calculated to be 2% and 3A tears accounted for 36.7% of these cases. Further, OASIS was more prevalent in women aged 21-35 yrs (2.3%), primiparas (2.8%), South East Asian ethnicity (3.1%) and birth weight >4Kg (2.4%). OASIS presented in 7% of forceps deliveries and 2.6% of spontaneous deliveries.

| Incidence OASIS | |
|------------------|---------------|
| Perineum | EH n (%) |
| Intact up to 2nd | 4699 (98) |
| OASIS | 96 (2) |
| 3A | 36 (36.7) |
| 3B | 33 (34.4) |
| 3C | 24 (25) |
| 4 | 2 (2) |
| Buttonhole | 1 (1) |



Discussion Our incidence of OASIS is similar to published studies, and keeps in line with known risk factors. Interestingly, we had a higher incidence of OASIS in spontaneous deliveries. Even though, adherence to our protocol is remarkable, accurate documentation of perineal protection and the type of tear must improve. Following the audit, we highly recommend continued use of "perineal protection bundle of care".